

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111, and in light of the remarks which follow, are respectfully requested.

By the present amendment, claim 4 has been canceled without prejudice or disclaimer. Support for the amendments to claims 1 and 3 may be found, for example, on page 4, second full paragraph and on page 37 line 14 to page 38, line 1, of the specification. Support for new claims 13 and 14 may be found on page 38, line 1. In addition, claims 9 and 12 have been amended to correct typographical errors therein. Claims 1-3 and 5-14 are now pending in this application, with claims 7-12 being withdrawn from consideration on the merits.

Claims 1-6 were rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,436,305 (Alt et al), U.S. Patent No. 5,571,880 (Alt et al), and J. of Organometallic Chemistry, 561 (1998), pp. 37-47 (Lee et al) for the reasons set forth in paragraph (4) of the Official Action. Reconsideration and withdrawal of this rejection are requested for at least the following reasons.

Claims 1 and 3 have been amended to specify that the (co)polymerization is conducted with ethylene as the main monomer and at a polymerization temperature of 100° to 250°C.

As is indicated on page 38, and page 40, lines 10 to 17 of the specification, the presently claimed process provides a low molecular weight ethylene (co)polymer having a narrow molecular weight distribution and a low melting point with high productivity. Furthermore, since the polymerization is conducted at a temperature ranging from 100 to

250°C., a heat removal device can be miniaturized, the equipment cost can be reduced and, at the same time, the residence time can be shortened. The presently claimed process is neither disclosed in nor suggested by the cited art.

Alt et al '305 discloses fluorenyl-containing metallocene and olefin polymerization using the same. Alt et al '880 discloses organometallic fluorenyl compounds and use thereof in an α -olefin polymerization process. Lee teaches ethylene-bridged fluorenyl-containing metallocenes and propylene polymerization using the same. More specifically, Examples XI and XII of Alt et al '305 concern ethylene polymerization. However, the polymerization temperature is less than 100°C. Example XIII concerns propylene polymerization. Examples XIV and XV are concerned with polymerization of 4-methyl-1-pentene. In Examples VI (Table I) and Example VII (Table II) of Alt et al '880, ethylene polymerization was reported. However, the polymerization temperature was lower than 100°C. Examples IX and X are concerned with polymerization of 4-methyl-1-pentene. Example XI is concerned with propylene polymerization. Lee et al is directed solely to propylene polymerization and at a temperature ranging from 25 to 90°C.

Thus, none of the cited references anticipates the claimed process where (co)polymerization is conducted with ethylene as the main monomer and at a polymerization temperature of 100 to 250°C. Nor do the cited references suggest that conducting ethylene polymerization at the specified temperature produces the unexpected results discussed previously. These results could not have been predicted from the prior art disclosures

In view of the above, the §102 and §103 rejections over Alt et al '305, Alt et al '880 and Lee et al should be reconsidered and withdrawn. Such action is earnestly solicited.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at her earliest convenience.

Respectfully submitted,

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